AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-3. (Cancelled).

4. (Currently Amended)   A data processing apparatus ~~as set forth in claim 3, wherein:~~ for performing a second quantization on data to be processed, the data to be processed obtained by performing inverse quantization after performing a first quantization by a first quantization scale, comprising:

a quantization scale generation means for generating a second quantization scale $Q(i)$ based on the first quantization scale for the data to be processed, the data to be processed corresponding to image data including blocks of data $MBm(i)$ and $MBm(i+1)$, and the first quantization scale including scales $Qm(i)$ and $Qm(i+1)$, wherein blocks $MBm(i)$ and $MBm(i+1)$ are subjected to the first quantization based on the first quantization scales $Qm(i)$ and $Qm(i+1)$; and

a quantization means for performing the second quantization on the data to be processed based on the second quantization scale generated by the quantization scale generation means ~~when two block data MBm(i) and MBm(i+1) respectively corresponding to adjacent two block image positions in the vertical direction in the image data are subjected to the first quantization based on the first quantization scales Qm(i) and Qm(i+1), respectively,~~

wherein the quantization scale generation means calculates [[the]] a second

quantization scale Q(i) ~~to be used when performing the second quantization on the~~

~~block data MBm(i)~~ based on ~~both of the first quantization~~ the scales Qm(i) and Qm(i+1)͟,

and calculates an additional [[the]] second quantization scale Q(i+1) ~~to be used when~~

~~performing the second quantization on the block data MBm(i+1)~~;͟ and

wherein the quantization means performs the second quantization on the block

data MBm(i) based on the second quantization scale Q(i) calculated by the quantization

scale generation means and performs the second quantization on the block data

MBm(i+1) based on the additional second quantization scale Q(i+1).

5. (Currently Amended) A data processing apparatus as set forth in claim 4,

~~furthermore~~ further comprising:

a control means for generating first field data configured based on block data

MBjt(i) obtained by performing the second quantization on the block data MBm(i)͟;~~ and~~͟

wherein the control means generates second field data to form a pair with the first field

data, the second filed data configured based on block data MBjb(i) obtained by

performing the second quantization on the block data MBm(i+1)͟,~~ in the case where field~~

~~coding at a picture level is performed on the image data~~.

6. (Currently Amended) A data processing apparatus as set forth in claim 4, further

comprising:

a control means for generating field data configured based on block data MBj(i)

and MBj(i+1) obtained ~~respectively~~ by performing the second quantization on the block

data MBm(i) and MBm(i+1) ~~in the case where field coding in unit of the two block data~~

~~MBm(i) and MBm(i+1) is performed on the image data~~.

7. (Currently Amended) A data processing apparatus as set forth in claim 4,

wherein[[:]] the quantization scale generation means specifies a quantization scale Qa

based on a predetermined function using the first quantization scales Qm(i) and

Qm(i+1) ~~as arguments~~, and calculates the second quantization scales Q(i) and Q(i+1)

based on the specified quantization scale Qa.

8. (Currently Amended) A data processing apparatus as set forth in claim 7,

wherein[[:]] the quantization scale generation means specifies the quantization scale Qa

based on the function using the smaller of the first quantization scales Qm and Qm(i+1)

as [[a]] quantization scale Qa.

9. (Currently Amended) A data processing apparatus as set forth in claim 7,

wherein[[:]] the quantization scale generation means specifies the quantization scale Qa

~~based on the function for calculating a quantization scale Qa~~ by calculating

(Qm(i)+Qm(i+1)+1)/2.

10. (Currently Amended) A data processing apparatus as set forth in claim 7,

wherein[[:]] the quantization scale generation means calculates an average value [[ave]]

of [[the]] quantization scales ~~Qa of all of~~ corresponding to the [[block]] blocks of data ~~in~~

~~field data or frame data, to which the block data to be processed belongs~~, and

calculates an activity value [[Nact]] by dividing the quantization scale Qa of the block

data to be processed by the average value [[ave]], and calculates the second

quantization scale of the block data to be processed being calculated based on the

activity [[Nact]] value.

11. (Currently Amended)   A data processing method for performing second

quantization on data to be processed, the data to be processed [[and]] obtained by

performing inverse quantization after performing first quantization by a first quantization

scale, including the method comprising: a first step of generating a second quantization

scale based on the first quantization scale; and a second step of performing the second

quantization on the data to be processed based on the second quantization scale

generated in the first step

generating a second quantization scale Q(i) based on the first quantization scale

for the data to be processed, the data to be processed corresponding to image data

including blocks of data MBm(i) and MBm(i+1), and the first quantization scale including

scales Qm(i) and Qm(i+1), wherein blocks MBm(i) and MBm(i+1) are subjected to the

first quantization based on the first quantization scales Qm(i) and Qm(i+1);

performing the second quantization on the data to be processed based on the

generated second quantization scale, wherein a second quantization scale Q(i) is

calculated based on the scales Qm(i) and Qm(i+1);

calculating an additional second quantization scale Q(i+1);

performing the second quantization on the block data MBm(i) based on the

second quantization scale Q(i); and

performing the second quantization on the block data MBm(i+1) based on the additional quantization scale Q(i+1).

12. (Currently Amended) A coding apparatus, comprising:

a decoding means for generating ~~decoding~~ decoded data by decoding coding data ~~generated by performing coding on motion image data by a first coding method and~~ obtained by performing first quantization based on a first quantization scale including first quantization scales Qm(i) and Qm(i+1) ~~in the coding step~~;

a quantization scale generation means for generating a second quantization scale based on the first quantization scale for the decoded data, the decoded data including blocks of data MBm(i) and MBm(i+1), wherein blocks MBm(i) and MBm(i+1) are subjected to the first quantization based on the first quantization scales Qm(i) and Qm(i+1); and

a quantization means for performing second quantization on the ~~decoding~~ decoded data based on the second quantization scale generated by the quantization scale generation means ~~in a step of performing coding in a second coding method which is different from the first coding method on the decoding data generated by the decoding means~~,

wherein the quantization scale generation means calculates a second quantization scale Q(i) based on the scales Qm(i) and Qm(i+1), and calculates an additional second quantization scale Q(i+1), and

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wherein the quantization means performs the second quantization on the block data MBm(i) based on the second quantization scale Q(i) calculated by the quantization scale generation means and performs the second quantization.

13. (Currently Amended) A data processing apparatus for performing second quantization on data to be processed, the data to be processed [[and]] obtained by performing inverse quantization after performing first quantization by a first quantization scale, comprising: a quantization scale generation circuit for generating a second quantization scale based on the first quantization scale; and a quantization circuit for performing the second quantization on the data to be processed based on the second quantization scale generated by the quantization scale generation circuit

a quantization scale generation circuit for generating a second quantization scale Q(i) based on the first quantization scale for the data to be processed, the data to be processed corresponding to image data including blocks of data MBm(i) and MBm(i+1), and the first quantization scale including scales Qm(i) and Qm(i+1), wherein blocks MBm(i) and MBm(i+1) are subjected to the first quantization based on the first quantization scales Qm(i) and Qm(i+1); and

a quantization circuit for performing the second quantization on the data to be processed based on the second quantization scale generated by the quantization scale generation circuit,

wherein the quantization scale generation circuit calculates a second quantization scale Q(i) based on the scales Qm(i) and Qm(i+1), and calculates an additional second quantization scale Q(i+1), and

wherein the quantization circuit performs the second quantization on the block data MBm(i) based on the second quantization scale Q(i) calculated by the quantization scale generation circuit and performs the second quantization on the block data MBm(i+1) based on the additional second quantization scale Q(i+1).

14. (New) The data processing apparatus as set forth in claim 1, wherein the blocks of data MBm(i) and MBm(i+1) correspond to two blocks of data having adjacent positions in the image data.

15. (New) The processing method as set forth in claim 11, wherein the blocks of data MBm(i) and MBm(i+1) correspond to two blocks of data having adjacent positions in the image data.